

## CLIMATOLOGICAL DATA FOR JULY, 1913.

## DISTRICT NO. 11, CALIFORNIA.

Prof. ALEXANDER G. McADIE, District Editor.

## GENERAL SUMMARY.

July, 1913, was a month of nearly normal temperature; but warmer than July of the preceding year and not quite as warm as July, 1911, or July, 1910. In the matter of precipitation July, 1913, breaks all records for amount of precipitation in a midsummer month. The rain was heavy, although not of long duration. The average for the State as a whole was 0.46 of an inch, which is a departure of more than 0.40 of an inch above the normal.

On July 22d there was heavy rain in the central and northern counties. There were frequent thunderstorms throughout the month in the Sierra and tourists and campers experienced much unpleasant weather where usually extremely dry conditions prevail.

The water supply was somewhat augmented by the unusual rain; but the effect was only temporary and complaints of scarcity of water were common at the end of the month.

From an agricultural point of view weather conditions were fair. There was some slight damage to drying apricots and peaches but no injury to crops in general. Fortunately there were no prolonged periods of desiccating north winds. There was the normal amount of sunshine and less fog than usual on the coast.

## TEMPERATURE.

The mean temperature for the State was nearly 1° below the normal. The following table gives the means and departures for each July from 1897 to 1913, inclusive:

Year.	Mean.	Departure.	Year.	Mean.	Departure.
	° F.	° F.		° F.	° F.
1897.....	74.5	+0.5	1906.....	76.8	+2.8
1898.....	81.4	+7.4	1907.....	73.1	-0.9
1899.....	77.9	+3.9	1908.....	78.4	+2.4
1900.....	75.9	+1.9	1909.....	71.2	-2.8
1901.....	76.0	+2.0	1910.....	75.5	+1.5
1902.....	72.8	-1.2	1911.....	74.1	+0.1
1903.....	71.2	-2.8	1912.....	71.0	-3.0
1904.....	72.2	-1.8	1913.....	73.1	-0.9
1905.....	74.8	+0.8			

The highest temperature recorded at any station was 119° at Heber on the 10th. The lowest temperature was 27° at Deer Creek on the 14th, which is 4° higher than the lowest recorded during the same month last year.

On July 11th unusually warm weather prevailed in the central counties of California. Maximum temperatures exceeding 110° were reported at many points. At St. Helena, Healdsburg, and other points in this section, the temperature reached 115°.

## PRECIPITATION.

The rainfall was unusually heavy. All rainfall records for July were broken during the 48 hours of July 22-23, and there were constant showers in the mountains from

the 22d to the 29th. The greatest monthly amount was 4.40 at Madeline and the greatest 24-hour amount was 2.15 inches at Macdoel. There was no rainfall at 31 stations.

The following table gives the average precipitation and departure from the normal for each July from 1897 to 1912, inclusive:

Year.	Mean.	Departure.	Year.	Mean.	Departure.
	Inches.	Inches.		Inches.	Inches.
1897.....	0.01	-0.03	1906.....	0.04	0.00
1898.....	T.	-0.04	1907.....	.03	-0.01
1899.....	T.	-0.04	1908.....	.04	.00
1900.....	.03	-0.01	1909.....	.05	+0.01
1901.....	.01	-0.03	1910.....	.10	+0.06
1902.....	.07	+0.03	1911.....	.10	+0.06
1903.....	.03	-0.01	1912.....	.06	+0.02
1904.....	.09	+0.05	1913.....	.46	+0.42
1905.....	.01	-0.03			

## SUNSHINE.

The following table gives the hours of sunshine and percentages of the possible:

Stations.	Hours.	Percentage of possible.	Stations.	Hours.	Percentage of possible.
Eureka.....	215	47	Sacramento.....	409	89
Fresno.....	405	90	San Diego.....	320	73
Los Angeles.....	307	70	San Francisco.....	301	67
Mount Tamalpais.....	407	91	San Jose.....	371	83
Red Bluff.....	372	82	San Luis Obispo.....	327	74

## NOTE ON THE WEATHER AT POINT REYES.

By Mr. JAMES JONES, Observer.

During the past 22 years precipitation to the amount of 0.01 inch or more, for the month of July, has occurred only six times. Therefore the 24-hour rainfall of 0.13 on July 22-23 this year is to be considered rather remarkable. Hay crops in this vicinity had just been cut and not yet stacked when this unseasonable rain came on, but only slight damage resulted.

The monthly mean temperature was, with the exception of that for July, 1896, the highest July mean ever recorded. This high average was caused by slightly higher daily averages throughout the month, as there were no periods of exceptionally warm weather.

There were 21 days with dense fog, but this is not unusual at this station.

The first half of the month was somewhat windy, but after the 15th there was comparatively little wind, not one gale of 40 miles or over being recorded after that date.

Light haze was observed six times during the month. On July 12 there was a light haze all afternoon. The sunset was followed by a reddish-yellow glow and wisps of smoke, visible just above the haze.